updated search LVC 1/2/03

d his

(FILE 'HOME' ENTERED AT 14:04:54 ON 02 JAN 2003)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT' ENTERED AT 14:05:16 ON 02 JAN 2003

L1 4607 S (MUSCLE DAMAGE)
L2 45 S L1 AND MYOFILAMENT?
L3 2 S L2 AND TROPONIN?

FILE 'STNGUIDE' ENTERED AT 14:07:31 ON 02 JAN 2003

L4 0 S L1 AND TROPONIN?

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT' ENTERED AT 14:10:37 ON 02 JAN 2003

L5 147 S L1 AND TROPONIN?
L6 2 S L5 AND MYOFILAMENT?

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT' ENTERED AT 14:21:20 ON 02 JAN 2003

L7 4607 S (MUSCLE DAMAGE)
L8 147 S L7 AND TROPONIN?
L9 70 DUPLICATE REMOVE L8 (77 DUPLICATES REMOVED)
L10 0 S L9 AND IMPLANT?
L11 1 S L9 AND PHOSPHORYLATION?
L12 242 S (MYOFILAMENT PROTEIN)
L13 1 S L8 AND L12

=>

L9 ANSWER 39 OF 70 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 22
AN 1997:433753 BIOSIS
DN PREV199799732956
TI Cardiac **troponin** I should replace CKMB for the diagnosis of acute myocardial infarction.
AU Bhagat, Chotoo I. (1); Langton, Paul; Lewer, Michelle; Ching, Simon; Beilby, John P.
CS (1) Dep. Clin. Biochemistry, PathCentre, Locked Bag 209, Nedlands, WA 6009 Australia
SO Annals of Clinical Biochemistry, (1997) Vol. 34, No. 5, pp. 511-516. ISSN: 0004-5632.
DT Article
LA English
AB Cardiac **troponin** I (cTnI) has been reported to be a highly specific marker for cardiac injury. We investigated the performance of this assay in patients admitted to a coronary care unit for suspected acute myocardial infarction (AMI), patients with extensive skeletal **muscle damage**, marathon runners and as a routine diagnostic test over a four week period. cTnI proved to be as sensitive a marker for AMI as creatine kinase/MB isoenzyme (CKMB) in patients admitted to the coronary care unit. In 10 patients with a proven AMI, the cTnI remained elevated from 69 to 183 h with a median time of 127 h. Cardiac **troponin** I had superior specificity to CKMB in patients with skeletal **muscle damage**. It was very useful in these patients to confirm or exclude concurrent myocardial damage. In routine diagnostic use, cTnI had greater efficiency than CKMB to classify patients as having an AMI. Consequently cTnI should replace CKMB as a marker for AMI.
CC Biochemical Studies - General *10060
Enzymes - General and Comparative Studies; Coenzymes *10802
Cardiovascular System - General; Methods *14501
Muscle - General; Methods *17501
BC Hominidae *86215
IT Major Concepts
Biochemistry and Molecular Biophysics; Cardiovascular System (Transport and Circulation); Enzymology (Biochemistry and Molecular Biophysics); Muscular System (Movement and Support)
IT Miscellaneous Descriptors
ACUTE MYOCARDIAL INFARCTION; CARDIAC INJURY MARKER; CARDIAC **TROPONIN** I; CKMB; CLINICAL CHEMISTRY; CREATINE KINASE/MB ISOENZYME; HEART DISEASE; MUSCLE DISEASE; PATIENT; SKELETAL **MUSCLE DAMAGE**; VASCULAR DISEASE
ORGN Super Taxa
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name
human (Hominidae)
ORGN Organism Superterms
animals; chordates; humans; mammals; primates; vertebrates

L9 ANSWER 48 OF 70 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 27
AN 1996:431723 BIOSIS
DN PREV199699145329
TI Use of enzyme immunoassay for measurement of skeletal tropinin-I utilizing isoform-specific monoclonal antibodies.
AU Takahashi, Miyoko (1); Lee, Lilian; Shi, Qinwei; Gawad, Yehia; Jackowski, George
CS (1) Spectral Diagn. Inc., 135 The West Mall, Toronto, ON M9C 1C2 Canada
SO Clinical Biochemistry, (1996) Vol. 29, No. 4, pp. 301-308.
ISSN: 0009-9120.
DT Article
LA English
AB Objectives: To determine the serum level of fast skeletal **troponin** I (fsTnl) resulting from skeletal **muscle damage**, we have developed a sensitive two-site enzyme immunoassay to measure skeletal **troponin** I. Design and Methods: Twelve monoclonal antibodies were raised against human fsTnl. Of these antibodies, 8 were fsTnl-specific and the remaining 4 reacted with both skeletal and cardiac **troponin** I (cTnl). Two monoclonals were utilized fora development of this fsTnl immunoassay. Standards were made with purified recombinant human fsTnl for the range of 0-25 mu-g/mL. Results: Total assay variance (CV) ranged from 1.7% to 9.6%. The upper limit of the normal reference range was established as 0.2 pg/L by determining fsTnl concentration in sera of 108 healthy donors without evidence of **muscle damage**. Purified human cTnl up to 500 mu-g/L and cTnl-positive clinical serum samples yielded negative results in the fsTnl assay. The serum levels of fsTnl were determined in trauma patients, patients with chronic degenerative muscle disease, and marathon runners. In the study populations, the serum levels of fsTnl were correlated with other biochemical markers that are traditionally used to monitor striated **muscle damage**. Conclusions: In the present preliminary studies, measuring the serum levels of fsTnl in patients with various forms of **muscle damage** is more accurate than using the classical non muscle-specific biochemical markers.
CC Biochemical Methods - General *10050
Biochemical Studies - General *10060
Enzymes - General and Comparative Studies; Coenzymes *10802
Pathology, General and Miscellaneous - General *12502
Blood, Blood-Forming Organs and Body Fluids - General; Methods *15001
Muscle - General; Methods *17501
Immunology and Immunochemistry - General; Methods *34502
BC Hominidae *86215
IT Major Concepts
Biochemistry and Molecular Biophysics; Blood and Lymphatics (Transport and Circulation); Enzymology (Biochemistry and Molecular Biophysics); Immune System (Chemical Coordination and Homeostasis); Methods and Techniques; Muscular System (Movement and Support); Pathology
IT Miscellaneous Descriptors
ANALYTICAL METHOD; CLINICAL CHEMISTRY; FAST SKELETAL **TROPONIN** I; IMMUNOLOGIC METHOD; INJURY; ISOFORM SPECIFIC MONOCLONAL ANTIBODIES; **MUSCLE DAMAGE**; PATIENT; SERUM LEVEL; SKELETAL MUSCLE MARKER; TWO-SITE ENZYME IMMUNOASSAY
ORGN Super Taxa
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name
human (Hominidae)
ORGN Organism Superterms
animals; chordates; humans; mammals; primates; vertebrates

L9 ANSWER 59 OF 70 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 31
AN 1995:309427 CAPLUS
DN 122:129686
TI Beyond CK-MB. Biochemical markers for perioperative myocardial infarction
AU Mangano, Dannis T.
CS Research Group, University of California, San Francisco, CA, 94121, USA
SO Anesthesiology (1994), 81(6), 1317-20
CODEN: ANESAV; ISSN: 0003-3022
DT Journal; General Review
LA English
CC 14-0 (Mammalian Pathological Biochemistry)
AB A review with 27 refs. Diagnosis of perioperative myocardial infarction remains an important but challenging task. Both clin. symptoms and electrocardiog. changes have inherent limitations. Therefore, biochem. markers for myocardial injury are crit. diagnostic tools. The use of creatine kinase isoenzymes (CK-MB) has enhanced detection of perioperative myocardial infarction; however, skeletal **muscle damage** during surgery limits CK-MB specificity. In this regard, the cardiac **troponins** appear to offer increased sensitivity, primarily because of their prolonged diagnostic window and even may offer enhanced specificity (esp. **troponin**-I) in patients with surgical skeletal **muscle damage**. In addn., the convenience of relatively infrequent sampling (because of the prolonged diagnostic window), as well as potential cost savings, make use of the **troponin** markers attractive. However, definitive data in high-risk patients undergoing either cardiac or noncardiac surgery are still lacking, and significant questions remain regarding appropriate thresholds, specificity of **troponin**-T, and comparative accuracy of **troponin**-T, **troponin**-I, and CK-MB for diagnosis (and prognosis) of perioperative myocardial infarction.
ST review CKMB marker perioperative heart infarction
IT Heart, disease
(infarction, beyond CK-MB, biochem. markers for perioperative myocardial infarction in humans)
IT 9001-15-4, Creatine kinase
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(beyond CK-MB, biochem. markers for perioperative myocardial infarction in humans)

d his

(FILE 'HOME' ENTERED AT 14:04:54 ON 02 JAN 2003)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT' ENTERED AT 14:05:16 ON 02 JAN 2003

L1 4607 S (MUSCLE DAMAGE)
L2 45 S L1 AND MYOFILAMENT?
L3 2 S L2 AND TROPONIN?

FILE 'STNGUIDE' ENTERED AT 14:07:31 ON 02 JAN 2003

L4 0 S L1 AND TROPONIN?

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT' ENTERED AT 14:10:37 ON 02 JAN 2003

L5 147 S L1 AND TROPONIN?
L6 2 S L5 AND MYOFILAMENT?

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT' ENTERED AT 14:21:20 ON 02 JAN 2003

L7 4607 S (MUSCLE DAMAGE)
L8 147 S L7 AND TROPONIN?
L9 70 DUPLICATE REMOVE L8 (77 DUPLICATES REMOVED)
L10 0 S L9 AND IMPLANT?
L11 1 S L9 AND PHOSPHORYLATION?
L12 242 S (MYOFILAMENT PROTEIN)
L13 1 S L8 AND L12

=>

L9 ANSWER 39 OF 70 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 22
AN 1997:433753 BIOSIS
DN PREV199799732956
TI Cardiac **troponin** I should replace CKMB for the diagnosis of acute myocardial infarction.
AU Bhagat, Chotoo I. (1); Langton, Paul; Lewer, Michelle; Ching, Simon; Beilby, John P.
CS (1) Dep. Clin. Biochemistry, PathCentre, Locked Bag 209, Nedlands, WA 6009 Australia
SO Annals of Clinical Biochemistry, (1997) Vol. 34, No. 5, pp. 511-516. ISSN: 0004-5632.
DT Article
LA English
AB Cardiac **troponin** I (cTnI) has been reported to be a highly specific marker for cardiac injury. We investigated the performance of this assay in patients admitted to a coronary care unit for suspected acute myocardial infarction (AMI), patients with extensive skeletal **muscle damage**, marathon runners and as a routine diagnostic test over a four week period. cTnI proved to be as sensitive a marker for AMI as creatine kinase/MB isoenzyme (CKMB) in patients admitted to the coronary care unit. In 10 patients with a proven AMI, the cTnI remained elevated from 69 to 183 h with a median time of 127 h. Cardiac **troponin** I had superior specificity to CKMB in patients with skeletal **muscle damage**. It was very useful in these patients to confirm or exclude concurrent myocardial damage. In routine diagnostic use, cTnI had greater efficiency than CKMB to classify patients as having an AMI. Consequently cTnI should replace CKMB as a marker for AMI.
CC Biochemical Studies - General *10060
Enzymes - General and Comparative Studies; Coenzymes *10802
Cardiovascular System - General; Methods *14501
Muscle - General; Methods *17501
BC Hominidae *86215
IT Major Concepts
Biochemistry and Molecular Biophysics; Cardiovascular System (Transport and Circulation); Enzymology (Biochemistry and Molecular Biophysics); Muscular System (Movement and Support)
IT Miscellaneous Descriptors
ACUTE MYOCARDIAL INFARCTION; CARDIAC INJURY MARKER; CARDIAC **TROPONIN** I; CKMB; CLINICAL CHEMISTRY; CREATINE KINASE/MB ISOENZYME; HEART DISEASE; MUSCLE DISEASE; PATIENT; SKELETAL **MUSCLE DAMAGE**; VASCULAR DISEASE
ORGN Super Taxa
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name
human (Hominidae)
ORGN Organism Superterms
animals; chordates; humans; mammals; primates; vertebrates

L9 ANSWER 48 OF 70 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE 27
AN 1996:431723 BIOSIS
DN PREV199699145329
TI Use of enzyme immunoassay for measurement of skeletal tropinin-I utilizing isoform-specific monoclonal antibodies.
AU Takahashi, Miyoko (1); Lee, Lilian; Shi, Qinwei; Gawad, Yehia; Jackowski, George
CS (1) Spectral Diagn. Inc., 135 The West Mall, Toronto, ON M9C 1C2 Canada
SO Clinical Biochemistry, (1996) Vol. 29, No. 4, pp. 301-308.
ISSN: 0009-9120.
DT Article
LA English
AB Objectives: To determine the serum level of fast skeletal **troponin** I (fsTnl) resulting from skeletal **muscle damage**, we have developed a sensitive two-site enzyme immunoassay to measure skeletal **troponin** I. Design and Methods: Twelve monoclonal antibodies were raised against human fsTnl. Of these antibodies, 8 were fsTnl-specific and the remaining 4 reacted with both skeletal and cardiac **troponin** I (cTnl). Two monoclonals were utilized fora development of this fsTnl immunoassay. Standards were made with purified recombinant human fsTnl for the range of 0-25 mu-g/mL. Results: Total assay variance (CV) ranged from 1.7% to 9.6%. The upper limit of the normal reference range was established as 0.2 pg/L by determining fsTnl concentration in sera of 108 healthy donors without evidence of **muscle damage**. Purified human cTnl up to 500 mu-g/L and cTnl-positive clinical serum samples yielded negative results in the fsTnl assay. The serum levels of fsTnl were determined in trauma patients, patients with chronic degenerative muscle disease, and marathon runners. In the study populations, the serum levels of fsTnl were correlated with other biochemical markers that are traditionally used to monitor striated **muscle damage**. Conclusions: In the present preliminary studies, measuring the serum levels of fsTnl in patients with various forms of **muscle damage** is more accurate than using the classical non muscle-specific biochemical markers.
CC Biochemical Methods - General *10050
Biochemical Studies - General *10060
Enzymes - General and Comparative Studies; Coenzymes *10802
Pathology, General and Miscellaneous - General *12502
Blood, Blood-Forming Organs and Body Fluids - General; Methods *15001
Muscle - General; Methods *17501
Immunology and Immunochemistry - General; Methods *34502
BC Hominidae *86215
IT Major Concepts
Biochemistry and Molecular Biophysics; Blood and Lymphatics (Transport and Circulation); Enzymology (Biochemistry and Molecular Biophysics); Immune System (Chemical Coordination and Homeostasis); Methods and Techniques; Muscular System (Movement and Support); Pathology
IT Miscellaneous Descriptors
ANALYTICAL METHOD; CLINICAL CHEMISTRY; FAST SKELETAL **TROPONIN** I; IMMUNOLOGIC METHOD; INJURY; ISOFORM SPECIFIC MONOCLONAL ANTIBODIES; **MUSCLE DAMAGE**; PATIENT; SERUM LEVEL; SKELETAL MUSCLE MARKER; TWO-SITE ENZYME IMMUNOASSAY
ORGN Super Taxa
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia
ORGN Organism Name
human (Hominidae)
ORGN Organism Superterms
animals; chordates; humans; mammals; primates; vertebrates

L9 ANSWER 59 OF 70 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 31
AN 1995:309427 CAPLUS
DN 122:129686
TI Beyond CK-MB. Biochemical markers for perioperative myocardial infarction
AU Mangano, Dannis T.
CS Research Group, University of California, San Francisco, CA, 94121, USA
SO Anesthesiology (1994), 81(6), 1317-20
CODEN: ANESAV; ISSN: 0003-3022
DT Journal; General Review
LA English
CC 14-0 (Mammalian Pathological Biochemistry)
AB A review with 27 refs. Diagnosis of perioperative myocardial infarction remains an important but challenging task. Both clin. symptoms and electrocardiog. changes have inherent limitations. Therefore, biochem. markers for myocardial injury are crit. diagnostic tools. The use of creatine kinase isoenzymes (CK-MB) has enhanced detection of perioperative myocardial infarction; however, skeletal **muscle damage** during surgery limits CK-MB specificity. In this regard, the cardiac **troponins** appear to offer increased sensitivity, primarily because of their prolonged diagnostic window and even may offer enhanced specificity (esp. **troponin**-I) in patients with surgical skeletal **muscle damage**. In addn., the convenience of relatively infrequent sampling (because of the prolonged diagnostic window), as well as potential cost savings, make use of the **troponin** markers attractive. However, definitive data in high-risk patients undergoing either cardiac or noncardiac surgery are still lacking, and significant questions remain regarding appropriate thresholds, specificity of **troponin**-T, and comparative accuracy of **troponin**-T, **troponin**-I, and CK-MB for diagnosis (and prognosis) of perioperative myocardial infarction.
ST review CKMB marker perioperative heart infarction
IT Heart, disease
(infarction, beyond CK-MB, biochem. markers for perioperative myocardial infarction in humans)
IT 9001-15-4, Creatine kinase
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(beyond CK-MB, biochem. markers for perioperative myocardial infarction in humans)